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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,020	06/12/2001	John Border	PD-990184A	5838

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EXAMINER

PATEL, HARESH N

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/879,020

Applicant(s)

BORDER ET AL.

Examiner

Haresh Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 13-27 and 36-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 13-27 and 36-57 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/15/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-4, 13-27 and 36-57 are presented for examination. Claims 5-12 and 28-35 are cancelled. Claims 44-57 are new.

Response to Arguments

2. Applicant's arguments with respect to claims 1-4, 13-27 and 36-42 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

3. The examiner agrees with the applicant's acknowledgement of double patenting rejection with copending applications No.09/662072 and No.09/664165.

Response to Amendment

4. The amendment to the specification, abstract at page 31, dated 11/15/2004, has been acknowledged.

Drawings

5. Applicant submitted, Figure 1 with --prior art-- label, dated 11/15/2004, has been acknowledged.

Claim Objections

6. Claim 1 is objected to because of the following informalities: "A apparatus", should be "An apparatus", "the case", should be "a case".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 54 - 57 are rejected under 35 U.S.C. 112, first paragraph, Single Means Claim.

A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor.

Claim Rejections - 35 USC § 102

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8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 54 - 57 are rejected under 35 U.S.C. 102(e) as being anticipated by Gelman et al., 6,415,329 (Hereinafter Gelman).

10. As per claim 54, Gelman teaches a maximum segment size setting unit that is configured to set TCP maximum segment size in accordance with an IP address (e.g., col., 4, lines 5 – 31).

11. As per claim 55, Gelman teaches a method comprising: setting TCP maximum segment size in accordance with an IP address (e.g., col., 4, lines 5 – 31).

12. As per claim 56, Gelman teaches a system comprising: a maximum segment size setting unit that is configured to set TCP maximum segment size in accordance with a TCP port number (e.g., col., 4, lines 5 – 31).

13. As per claim 57, Gelman teaches a method comprising: setting TCP maximum segment size in accordance with a TCP port number (e.g., col., 4, lines 5 – 31).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1, 3, 4, 13-15, 24, 26, 27, 36, 43, 45-48, 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denker, 5,958,053 in view of Reid et al., 6,182,226 (Hereinafter Reid).

16. As per claim 1, Denker discloses a network apparatus (e.g., col., 6, lines 23 – 47) comprising:

a selective spoofing (e.g., col., 12, line 61 – col., 13, line 8) unit (e.g., col., 6, lines 23 – 47) that (a) determines application (e.g., col., 1, lines 16 – 18, col., 6, lines 10 - 15) is using a transport level connection (e.g., col., 17, lines 9 – 14) to said apparatus (e.g., col., 6, lines 23 – 47) and (b) decides whether or not to perform transport level spoofing (e.g., figure 11, col., 17, line 52 – col., 18, line 14) on the transport level connection (e.g., col., 17, lines 9 – 14) to said apparatus (e.g., col., 6, lines 23 – 47) in accordance with the determination of application (e.g., col., 1, lines 16 – 18, col., 6, lines 10 - 15) is using the transport level connection (e.g., col., 17, lines 9 – 14) to said apparatus (e.g., col., 6, lines 23 – 47),

wherein at least one of the following conditions is satisfied:

(1) in the case that said selective spoofing unit (e.g., col., 6, lines 23 – 47) has decided to perform transport level spoofing on the transport level connection (e.g., figure 11, col., 17, line 52 – col., 18, line 14) to said apparatus (e.g., col., 6, lines 23 – 47), maximum segment size is set

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(e.g., col., 4, lines 3 – 8) in accordance with the determination of application (e.g., col., 1, lines 16 – 18, col., 6, lines 10 - 15) is using the transport level connection (e.g., figure 11, col., 17, line 52 – col., 18, line 14) to said apparatus (e.g., col., 6, lines 23 – 47);

(2) in the case that said selective spoofing unit (e.g., col., 6, lines 23 – 47) has decided to perform transport level spoofing on the transport level connection (e.g., figure 11, col., 17, line 52 – col., 18, line 14) to said apparatus (e.g., col., 6, lines 23 – 47), a three-way handshake parameter is set (e.g., col., 4, lines 23 – 30, col., 5, lines 45 – 48) in accordance with the determination of application (e.g., col., 1, lines 16 – 18, col., 6, lines 10 - 15) is using the transport level connection (e.g., figure 11, col., 17, line 52 – col., 18, line 14) to said apparatus (e.g., col., 6, lines 23 – 47); and

(3) in the case that said selective spoofing unit (e.g., col., 6, lines 23 – 47) has decided to perform transport level spoofing on the transport level connection (e.g., figure 11, col., 17, line 52 – col., 18, line 14) to said apparatus (e.g., col., 6, lines 23 – 47), connection priority (e.g., col., 10, line 55 – col., 11, line 6) is set in accordance with the determination of application (e.g., col., 1, lines 16 – 18, col., 6, lines 10 - 15) is using the transport level connection (e.g., figure 11, col., 17, line 52 – col., 18, line 14) to said apparatus (e.g., col., 6, lines 23 – 47).

Denker also discloses that well-known applications such as Telnet and HTTP that rely on TCP (e.g., col., 1, lines 16 – 18). However, Denker does not specifically disclose determination of what application.

Reid discloses the well-known concept of determining of what application (e.g., col., 7, lines 33 – 58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Denker with the teachings of Reid in order to facilitate determining of what application among other applications. The information of what application to use would be utilized for utilizing the transport level connection using a protocol. The protocol would assist transferring information for the network apparatus.

17. As per claim 24, Denker and Reid disclose a method (e.g., col., 6, lines 23 – 38, Denker) for the claimed limitations rejected under claim 1.

18. As per claim 43, Denker and Reid disclose the claimed limitations rejected under claim 1. Denker also discloses in accordance with at least one field in a packet (e.g., col., 14, lines 25 – 42) received by the apparatus.

19. As per claim 53, Denker and Reid disclose the claimed limitations rejected under claim 1. Denker also discloses in accordance with at least one field in an IP packet or TCP packet (e.g., col., 8, lines 1- 14).

20. As per claims 3 and 26, Denker and Reid disclose the claimed limitations rejected under claims 1 and 24. Denker also discloses selective spoofing unit assigns spoofing resources including buffer space and control blocks (e.g., col., 9, lines 26 – 42) to the spoofed transport level connection (e.g., figure 11, col., 17, line 52 – col., 18, line 14).

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21. As per claims 4 and 27, Denker and Reid disclose the claimed limitations rejected under claims 1 and 24. Denker also discloses application is using the transport level connection (e.g., figure 11, col., 17, line 52 – col., 18, line 14) in accordance with a TCP port number (e.g., col., 18, lines 39 – 50).

22. As per claims 13 and 36, Denker and Reid discloses the claimed limitations rejected under claims 1 and 24. Denker also discloses the transport level connection (e.g., figure 11, col., 17, line 52 – col., 18, line 14) uses one of the Transmission Control Protocol (TCP) and the User Datagram Protocol (UDP) (e.g., col., 10, lines 50 – 58).

23. As per claim 14, Denker and Reid discloses the claimed limitations rejected under claim 1. Denker also discloses said apparatus is connected to another apparatus via a backbone connection (e.g., col., 6, lines 23 – 34).

24. As per claim 15, Denker and Reid discloses the claimed limitations rejected under claim 1. Denker also discloses wherein the backbone connection is via a wireless link (e.g., col., 6, lines 23 – 34).

25. As per claim 45, Denker and Reid discloses the claimed limitations rejected under claim 43. Denker also discloses a source network level address (e.g., col., 14, lines 23 - 43).

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26. As per claim 46, Denker and Reid discloses the claimed limitations rejected under claim

43. Reid also discloses a destination network level address (e.g., col., 6, lines 46 - 56).

27. As per claim 47, Denker and Reid discloses the claimed limitations rejected under claim

43. Denker also discloses a source network level address (e.g., col., 18, lines 39 – 50).

28. As per claim 48, Denker and Reid discloses the claimed limitations rejected under claim

43. Denker also discloses a transport level options field (e.g., col., 8, lines 1- 14).

29. As per claim 50, Denker and Reid discloses the claimed limitations rejected under claim

43. Denker also discloses field comprises a plurality of fields selected from the group consisting a destination IP address, a source IP address, a TCP destination port number, a TCP source port number, a TCP options field, and an IP differentiated services (DS) field (e.g., col., 18, lines 39 – 50, col., 8, lines 1- 14).

30. As per claim 51, Denker and Reid discloses the claimed limitations rejected under claim

43. Denker also discloses an IP address and TCP port number (e.g., col., 18, lines 39 – 50, col., 8, lines 1- 14).

31. As per claim 52, Denker and Reid discloses the claimed limitations rejected under claim

43. Denker also discloses a TCP field (e.g., col., 18, lines 39 – 50, col., 8, lines 1- 14).

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32. Claims 2 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denker and Reid in view of Bishop et al., 6,850,512 (Hereinafter Bishop).

33. As per claims 2 and 25 Denker and Reid discloses the claimed limitations rejected under claims 1 and 24. However, Denker and Reid do not specifically disclose high throughput applications.

Bishop discloses the well-known use of high throughput applications (e.g., col., 2, lines 2 – 14, col., 6, lines 6 – 22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Denker and Reid with the teachings of Bishop in order to facilitate usage of high throughput applications. The high throughput applications would enhance handling of data traffic over the transport level connection. The data traffic would assist transferring information for the network apparatus.

34. Claims 16 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denker and Reid in view of Jorgensen, 6,452,915.

35. As per claim 16, Denker and Reid discloses the claimed limitations rejected under claims 1 and 15. However, Denker and Reid do not specifically disclose high latency and high error rate.

Jorgensen discloses the well-known use of high latency and high error rate (e.g., col., 71, lines 7 – 22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Denker and Reid with the teachings of Jorgensen in order

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to facilitate usage of high latency and high error rate. The usage of high latency link would enhance handling of time required for a signal to travel between devices on the network. The usage of high error rate link would enhance reliability of the communication channel.

36. As per claim 49, Denker and Reid discloses the claimed limitations rejected under claims 43. However, Denker and Reid do not specifically disclose usage of differential services (DS) field.

Jorgensen discloses the well-known usage of differential services (DS) field (e.g., abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Denker and Reid with the teachings of Jorgensen in order to facilitate usage of differential services field. The differential services field would enhance handling of protocol flow and would enhance processing of packet from one device to another.

37. Claims 17-23, 37-42, 46, are rejected under 35 U.S.C. 103(a) as being unpatentable over Denker and Reid in view of "Official Notice".

38. As per claim 17, Denker and Reid discloses the claimed limitations rejected under claims 1 and 15. However, Denker and Reid do not specifically disclose satellite link.

"Official Notice" is taken that both the concept and advantages of providing a satellite link is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include satellite link in order to facilitate wireless link being satellite link. The

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satellite link would support high-throughput with minimum latency. Supporting high-throughput with minimum latency would enhance data flow between the network entities over the network.

For example, Soffer et al., 6,233,429 discloses usage of satellite link (e.g., figure 1).

39. As per claims 18-23, 37-42, Denker and Reid disclose the claimed limitations rejected under claims 1, 15 and 24. However, Denker and Reid do not specifically disclose apparatus as a component of a network gateway / host / hub / switch / VSAT / router.

“Official Notice” is taken that both the concept and advantages of providing apparatus is a component of a network gateway / host / hub / switch / VSAT / router is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include usage of a network gateway / host / hub / switch / VSAT / router in order to facilitate handling of an apparatus for spoofing. The network gateway / host / hub / switch / VSAT / router would support the apparatus for utilizing information over the network. For example, applicant's admitted prior art (AAPA) discloses usage of a network gateway (e.g., paragraph 12, pages 5 and 6), a host (e.g., paragraph 4, page 2). Bishop discloses usage of a hub (e.g., abstract). Durboraw, III et al., 5,995,042 discloses usage of a switch (e.g., col., 4, lines 52 – 62). Soffer et al., 6,233,429 discloses usage of a VSAT (e.g., figure 1). Chatterjee et al., 2001/0043600 discloses usage of a router (e.g., figure 1).

40. As per claim 46, Denker and Reid disclose the claimed limitations rejected under claims

43. However, Denker and Reid do not specifically disclose a destination port number.

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“Official Notice” is taken that both the concept and advantages of providing a destination port number is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a destination port number in order to facilitate field comprising a destination port number. The destination port number field would provide information of where the packet is targeted on the device.

Conclusion

41. The prior art made of record (forms PTO-892 and applicant provided IDS cited arts) and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The

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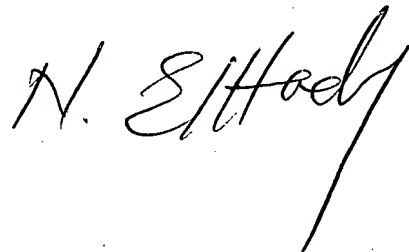
examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Haresh Patel

April 28, 2005

A handwritten signature in black ink, appearing to read "N. S. Hadley". The signature is written in a cursive, flowing style with a long, sweeping tail stroke extending downwards and to the right.